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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,453	03/31/2004	Vijay Kumar Reddy	TI-37048 (1962-10800)	8048
23494	7590	12/06/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			NATALINI, JEFF WILLIAM	
			ART UNIT	PAPER NUMBER
			2858	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,453

Applicant(s)

REDDY ET AL.

Examiner

Jeff Natalini

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Claims 11-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/4/05. In the next action please cancel all nonelected claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Chetlur et al. (6535014).

In regard to claim 1, Chetlur et al. discloses processing a request for a voltage overshoot or undershoot (col 3 line 17-23, controllable as to produce and overshoot/undershoot when needed) to determine a plurality of inputs based, in part, on a plurality of waveform parameters (col 3 line 14-44, broadly interpreted the inputs may be the controllable voltages (if they are controlled the values must be known/determined) Vdd and Vss (two is broadly interpreted as plurality) to determine the output of the VCO with amplitude and frequency (parameters)); applying the plurality of inputs to a waveform generation circuit (fig 1, Vcc and Vss are applied to VCO (12)); and generating a voltage waveform in accordance with at least one of the parameters

(col 3 line 24-44; fig 1 also shows a waveform being produced, the oscillating test signal is produced to allow various parameters of for example a DUT to be measured).

In regard to claims 2 and 3, Chetlur et al. discloses wherein the waveform generation circuit comprises an overshoot and undershoot generation circuit, and the waveform parameters comprise voltage overshoot/undershoot parameters (col 3 line 16-32).

In regard to claim 4, Chetlur et al. discloses where the waveform parameter consists of a at least frequency (col 3 line 29-32 or col 5 line 6-8).

In regard to claim 5, Chetlur et al. discloses where the request comprises determining a frequency (frequency is controlled so it must be known/determined, the determined frequency value is shown in fig 5, y-axis).

In regard to claim 8, Chetlur et al. determines a voltage value to apply to a voltage controlled oscillator (abstract; fig 1, Vdd and Vss are applied to VCO).

In regard to claim 9, Chetlur et al. discloses where processing the request further comprises processing the request based, in part, on the characteristics of the waveform generation circuit (col 4 line 5-9).

In regard to claim 10, Chetlur et al. discloses where a circuit reliability model is generated for a device coupled to the waveform generation circuit (figs 3 and 4; col 5 line 28-39 (results using the test show that aging is more pronounced for certain values of Vbulk, aging represents reliability of the DUT)).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chetlur et al. (6535014) in view of Hanai et al. (6522126).

Chetlur et al. determines a voltage value to apply (voltage is determined to be overshoot/undershoot-abstract, values seen in fig 3 and 4).

Chetlur et al. lacks wherein processing the request comprise applies the voltage value to a delay circuit.

Hanai et al. discloses determining a voltage value to apply to a delay circuit while testing semiconductor devices (col 2 line 66 – col 3 line 11).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Chetlur et al. to apply the voltage value to a delay circuit as taught by Hanai et al. in order to have a high speed waveform (col 3 line 8-11).

Response to Arguments

6. Applicant's arguments filed 10/4/05 have been fully considered but they are not persuasive. Examiner is required to make a broadest reasonable interpretation of the claim language for examination, applicant has pointed that "processing a request for a voltage overshoot or undershoot to determine a plurality of inputs based, in part, on a

plurality of waveform parameters; applying the plurality of inputs to a waveform generation circuit" is not taught by Chetlur. Examiner in the rejection above has attempted to be more specific by offering explanation, in addition to the column/line numbers, on how the interpretation is made to reject the claim language. Chetlur et al. teaches processing a request for a voltage overshoot or undershoot (col 3 line 17-23, controllable as to produce an overshoot/undershoot when needed) to determine a plurality of inputs based, in part, on a plurality of waveform parameters (col 3 line 14-44, the inputs may be the controllable voltages (if they are controlled the values must be known/determined) Vdd and Vss (two is broadly interpreted as plurality) to determine the output of the VCO with amplitude and frequency (parameters)); applying the plurality of inputs to a waveform generation circuit (fig 1, Vcc and Vss (inputs) are applied to VCO (12- waveform generating circuit)).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

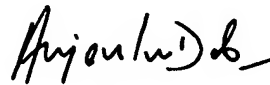
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeff Natalini



ANJAN DEB
PRIMARY EXAMINER